

REMARKS

Status of Claims

The Office Action mailed August 21, 2007 has been reviewed and the comments of the Patent and Trademark Office have been considered. Claims 1-27, 31-50 and 54-95 were pending in the application. Claims 25-27, 31-50 and 54-79 have been previously withdrawn, and claims 28-30 and 51-53 have been previously cancelled. Therefore, claims 1-24 and 80-95 are pending in the application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, are presented, with an appropriate defined status identifier.

Prior Art Rejections

In the Office Action, claims 1, 9, 17, 80 and 88 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application Publication No. 2002/0086685 (“Wallentin”) in view of U.S. Patent Application Publication No. 2003/0039237 (“Forslow”) in further view of U.S. Patent Application Publication No. 2005/0083876 (“Vialen”). Claims 2-8, 10-16, 18-24, 81-87 and 89-95 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Wallentin in view of Forslow in view of Vialen in further view of U.S. Patent Application Publication No. 2003/0013443 (“Willars”). Applicants respectfully traverse these rejections for at least the following reasons.

Claims 1, 9, 17, 80 and 88 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Wallentin in view of Forslow in further view of Vialen.

Independent claim 1 recites a paging system that includes **“a flag indicating whether or not said core network has the function of co-ordinating a packet service and a circuit service is added to said paging command.”** (emphasis added) Similar language is recited in remaining independent claims 9, 17, 80 and 88. The combination of Wallentin, Forslow and Vialen fails to teach or suggest at least a flag as claimed in the independent claims.

Specifically, Wallentin does not teach or suggest a flag as claimed independent claims as the Examiner stated in the outstanding Office Action. See, page 3, lines 1-2 of the Office Action.

Forslow discloses that a packet header “specifies one of several general classes of service that indicates a transport by a circuit-switched bearer or a packet-switched bearer.” In other words, the packet header of Forslow includes an indication of whether the packet is transported by a circuit-switched bearer or a packet-switched bearer. (paragraph 0095) Accordingly, as the Examiner stated in the outstanding Office action, the packet header may indicate the presence of circuit and packet switched services. However, the packet header of Forslow does not indicate “whether or not said core network has the function of co-ordinating a packet service and a circuit service,” as the claimed flag does. Furthermore, the indication disclosed in Forslow is not included in a paging command, whereas the flag of the invention as claimed is added to a paging command. Therefore, Forslow fails to teach or suggest the claimed “a flag indicating whether or not said core network has the function of co-ordinating is added to said paging command.”

Furthermore, independent claim 1 recites a paging system that includes “paging processing means for performing said paging processing using one of a paging control channel (PCCH) and a dedicated control channel (DCCH) depending on the connection status between said core network and said radio network controller if said flag is determined as indicating the presence of said co-ordinating function.” Independent claims 9, 17, 80 and 88 include analogous features. The combination of Wallentin, Forslow and Vialen fails to teach or suggest determining which channel to use for paging processing by utilizing a flag to determine the presence of a co-ordinating function.

The Examiner correctly asserts that neither Wallentin or Forslow disclose such a feature. *See*, page 3, lines 11-13 of the Office Action. Rather, the Examiner turns to Vialen to disclose determining which channel to use for paging processing by utilizing a flag to determine the presence of a co-ordinating function.

Vialen discloses a cellular communication system in which either a packet-switched or a circuit-switched network could be used (paragraph 0028) and discloses the logical channels (e.g. PCCH and DCCH) determine the data to be transmitted (paragraph 0039). However, Vialen does not teach or suggest using one of PCCH and DCCH for paging processing as described in the independent claims.

In view of paragraph 0043 of Vialen only for the purpose of discussion, Vialen just discloses channel selection for maintaining a high-quality channel, but not channel selection for paging processing. Also, Vialen offers no further explanation as to how channel selection is done:

“The **radio resource management sublayer** is responsible for frequency spectrum management and for the reactions of the system to changing radio circumstances. **It is further responsible for maintaining a high-quality channel, e.g. by taking care of channel selection**, the releasing of a channel, possible frequency hopping sequences, power adjustment, timing, reception of mobile station measurement reports, adjustment of a timing advance, ciphering settings, handover between cells.” (paragraph 0043, emphasis added).

Accordingly, Vialen fails to teach or suggest using one of PCCH and DCCH for paging processing as described in the independent claims, let alone channel selection for paging processing.

Furthermore, Vialen teaches an OSI protocol stack, in which the channels are described in detailing how communication runs through the stack. The OSI stack, and the communication transfer utilizing this stack as described in Vialen, is well-known in the art.

There is no teaching or suggestion in Vialen or the prior art of using one of PCCH and DCCH for paging processing depending on a flag to determine the presence of a co-ordinating function. As shown, neither Wallentin, Forslow, nor Vialen teach or suggest all of the features of the independent claim, specifically failing to teach or suggest at least “paging processing means for performing said paging processing using one of a paging control channel (PCCH) and a dedicated control channel (DCCH) depending on the connection status between said core network and said radio network controller if said flag is determined as indicating the presence of said co-ordinating function”. Thus, Wallentin, Forslow, and Vialen, either alone or in any combination thereof, would also fail to teach or suggest all of the limitations of the independent claims. If this rejection is maintained, the examiner is respectfully requested to point out where this feature is disclosed in either Wallentin, Forslow, or Vialen.

The dependent claims are also patentable for at least the same reasons as the independent claims on which they ultimately depend. In addition, they recite additional patentable features when considered as a whole. As mentioned above, Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

Claims 2-8, 10-16, 18-24, 81-87 and 89-95 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Wallentin in view of Forslow in view of Vialen and in further view of Willars. As shown, neither Wallentin, Forslow or Vialen teach or suggest all of the features of the independent claim, specifically failing to teach “paging processing means for performing said paging processing using one of a paging control channel (PCCH) and a dedicated control channel (DCCH) depending on the connection status between said core network and said radio network controller if said flag is determined as indicating the presence of said co-ordinating function,” as claimed in the independent claims. Willars does not disclose those features found lacking in Wallentin, Forslow, and Vialen.

Specifically, Willars teaches a Universal Mobile Telecommunications (UMTS) Terrestrial Radio Access Network (UTRAN) that accommodates both circuit switched and packet switched connections (paragraph 0010). However, Willars also does not teach or suggest determining which channel to use for paging processing by utilizing a flag to determine the presence of a co-ordinating function. Rather, Willars only teaches that:

“The present invention is described in the non-limiting, example context of a universal mobile telecommunications (UMTS) 10 shown in FIG. 1A. The ensuing description of FIG. 1A is also generally applicable to comparable FIGS. 2A, 3A, 4A, and 5A. A representative external core network(s) 16 may take one or more forms, including either a connection-oriented, external core network (such as, for example, the Public Switched Telephone Network (PSTN) and/or the Integrated Services Digital Network (ISDN)) or a connectionless external core network (e.g., the Internet).” (paragraph 0048)

There is no teaching or suggestion in Willars of determining which channel to use for paging processing dependent upon the type of network utilized, or of indicating the type of

network in a flag that could be utilized to determine the channel to use. Rather, Willars only mentions the different types of networks that could be utilized to expressly state that the invention is non-limiting and could be utilized with known types of networks. In fact, there is no further mention in Willars of the different types of networks, or any determinations made from the type of a network. Thus, Willars, either alone or in combination with Wallentin, Forslow and Vialen, would also fail to teach or suggest all of the limitations of the independent claims. If this rejection is maintained, the examiner is respectfully requested to point out where this feature is disclosed in either Wallentin, Forslow, Vialen or Willars.

Further, Willars fails to teach the features of the dependent claims. There is no teaching or suggestion in Willars of “means for performing said paging processing using said paging control channel (PCCH) if the connection status between said core network and said radio network controller is connectionless,” or “means for performing said paging processing using said dedicated control channel (DCCH) if the connection status between said core network and said radio network controller is connection oriented.” (dependent claims 2; analogous features found in dependent claims 10, 18, 81 and 89.) As mentioned above, Willars fails to mention any action taken based upon the connection status or type of the network. Thus, Willars fails to teach all of the features of the dependent claims as well. Wallentin, Forslow and Vialen also fail to teach these features, and have correctly not been relied on by the Examiner to teach these features of the dependent claims. If this rejection is maintained, the Examiner is respectfully requested to point out where these features are found in either Wallentin, Forslow, Vialen or Willars.

Conclusion

In view of the foregoing amendments and remarks, applicants believe that the application is now in condition for allowance. An indication of the same is respectfully requested. If there are any questions regarding the application, the examiner is invited to contact the undersigned attorney at the local telephone number below.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a

check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date 2/7/06

FOLEY & LARDNER LLP
Customer Number: 22428
Telephone: (202) 945-6014
Facsimile: (202) 672-5399

By 

George C. Beck
Attorney for Applicant
Registration No. 38,072

Ramya Ananthanarayanan
Agent for Applicant
Registration No. 59,597